IN THE CLAIMS

Amend the claims as follows.

Claims 1-13 (Canceled).

14. (Currently Amended) A method of treating a damaged nerve of the peripheral nervous system,

said treatment comprising administering to a subject comprising said nerve an effective non-toxic amount of an MGF (mechano-growth factor) polypeptide having the ability to reduce motoneurone loss by 20% or greater in response to nerve avulsion,

said administration comprising delivering said MGF polypeptide to the site of said damage;

said MGF polypeptide comprising at least one sequence selected from the group consisting of:

(a) ~~the~~ an amino acid sequence comprising a sequence encoded by exons 3-4-5-6 of a mammalian MGF; and ~~of human MGF (SEQ ID NO: 2), rat MGF (SEQ ID NO: 4), rabbit MGF (SEQ ID NO: 6);~~

~~(b) an amino acid sequence encoded by exons 5 and 6 of human MGF DNA (SEQ ID NO: 1), an amino acid sequence encoded by exons 5 and 6 of rat MGF DNA (SEQ ID NO: 3), an amino acid sequence encoded by exons 5 and 6 of rabbit MGF DNA (SEQ ID NO: 5), an amino acid sequence encoded by exons 4, 5 and 6 of human MGF DNA (SEQ ID NO: 1), an amino acid sequence encoded by exons 4, 5 and 6 of rat MGF DNA (SEQ ID NO: 3), an amino acid sequence encoded by exons 4, 5 and 6 of rabbit MGF DNA (SEQ ID NO: 5);~~

~~(c1) an amino acid sequence having 80% or greater sequence identity to an amino acid sequence of (a);~~

(~~c2~~b) an amino acid sequence having 80% or greater sequence identity, over the sequence encoded by exons 3-4-5-6, to an amino acid sequence of (b~~a~~);

~~(d) an amino acid sequence encoded by a nucleic acid sequence capable of selectively hybridising to a nucleic acid sequence encoding an amino acid sequence of (b); and~~

~~(e) an amino acid sequence comprising a fragment of at least 20 contiguous amino acids of a sequence of (b), (c2) or (d).~~

Claim 15. (Canceled)

16. (Previously Presented) A method of claim 14 wherein said MGF polypeptide is administered to said subject at a site of said damaged nerve by means of a conduit placed around the damaged nerve.

17. (Previously Presented) A method of claim 16 wherein the conduit comprises Poly-3-hydroxy-butyrate (PHB).

18. (Previously Presented) A method of claim 14 wherein the damaged nerve was severed.

19. (Previously Presented) A method of claim 14 wherein said MGF polypeptide has the ability to reduce motoneurone loss by 50% or greater in response to nerve avulsion.

20. (Previously Presented) A method of claim 14 wherein said MGF polypeptide has the ability to reduce motoneurone loss by 80% or greater in response to nerve avulsion.

21. (Previously Presented) A method of claim 14 wherein the MGF polypeptide is unglycosylated.

22. (Previously Presented) A method of claim 16 wherein said conduit comprises at least one of collagen and silicone.

Claims 23-36 (Canceled).

37. (Currently Amended) A method of claim 14 wherein said MGF polypeptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4 and 6.

Claims 38 and 39 (Canceled).

40. (Currently Amended) A method of claim 14 wherein said MGF polypeptide comprises an amino acid sequence having ~~9~~80% or greater sequence identity, over the sequence encoded by exons 3-4-5-6, to an ~~the~~ amino acid sequence of (a)~~human MGF (SEQ ID NO: 2), rat MGF (SEQ ID NO: 4), or rabbit MGF (SEQ ID NO: 6)~~.

Claims 41-56 (Canceled)

57. (new) A method of claim 14 wherein said MGF polypeptide comprises an amino acid sequence of 80% or greater identity to an amino acid sequence selected from the group consisting of SEQ ID NOs: 2, 4, and 6.

58. (new) A method of claim 16 wherein the damaged nerve was severed.

59. (new) A method of treating a damaged nerve of the peripheral nervous system,

said treatment comprising administering to a subject comprising said nerve an effective non-toxic amount of an MGF (mechano-growth factor) polypeptide having the ability to reduce motoneurone loss by 20% or greater in response to nerve avulsion,

said administration comprising delivering said MGF polypeptide to the site of said damage;

said MGF polypeptide comprising at least one sequence selected from the group consisting of:

(a) an amino acid sequence comprising a sequence encoded by exons 4-5-6 of a mammalian MGF; and

(b) an amino acid sequence having 80% or greater sequence identity, over the sequence encoded by exons 4-5-6, to an amino acid sequence of (a).

60. (new) A method of claim 59 wherein said MGF polypeptide is administered to said subject at a site of said damaged nerve by means of a conduit placed around the damaged nerve.

61. (new) A method of claim 60 wherein the conduit comprises Poly-3-hydroxy-butyrate (PHB).

62. (new) A method of claim 60 wherein said conduit comprises at least one of collagen and silicone.

63. (new) A method of claim 59 wherein the damaged nerve was severed.

64. (new) A method of claim 60 wherein the damaged nerve was severed.

65. (new) A method of claim 59 wherein the MGF polypeptide is unglycosylated.

66. (new) A method of claim 59 wherein said MGF polypeptide comprises an amino acid sequence selected from the group consisting of amino acids 26-110 of SEQ ID NO:2, amino acids 26-111 of SEQ ID NO:4, and amino acids 26-111 of SEQ ID NO:6.

67. (new) A method of claim 59 wherein said MGF polypeptide comprises an amino acid sequence which has 90% or greater sequence identity, over the sequence encoded by exons 4-5-6, with a sequence of (a).

68. (new) A method of claim 59 wherein said MGF polypeptide comprises an amino acid sequence which has 80% or greater sequence identity with an amino acid sequence selected from the group consisting of amino acids 26-110 of SEQ ID NO:2, amino acids 26-111 of SEQ ID NO:4, and amino acids 26-111 of SEQ ID NO:6.

69. (new) A method of claim 59 wherein said MGF polypeptide comprises an amino acid sequence which has 90% or greater sequence identity with an amino acid sequence selected from the group consisting of amino acids 26-110 of SEQ ID NO:2, amino acids 26-111 of SEQ ID NO:4, and amino acids 26-111 of SEQ ID NO:6.